

What is claimed is:

- 5 *Sub B1* 1. A heatsink comprising:
 a) column having a heat receiving face; and
 b) a plurality of pillar-type protrusions provided on a face other than the heat receiving face of said column in such a manner that they are parallel to or at a predetermined angle against the heat receiving face.
- 10 2. The heatsink of claim 1, wherein said pillar-type protrusions are formed by a plurality of first slits provided on a face other than the heat receiving face of said column parallel to the heat receiving face and a plurality of second slits provided transversely to the first slits.
- 15 3. The heatsink of claim 2, wherein a cross section of said column has one shape selected from rectangle, trapezoid, triangle, and a shape whose sectional width tapers off as it goes away at right angle from said heat receiving face.
- 20 *Sub B2* 4. The heatsink of claim 2, wherein said pillar-type protrusion has protrusions and/or recesses on its surface.
- 25 5. The heatsink of claim 2, wherein the heat receiving face protrudes further outwards than said column.
- 30 6. The heatsink of claim 2, wherein the vertical distance to the heat receiving face from the end of said pillar-type protrusion on the column side is shorter than that from the other end.
7. The heatsink of claim 6, wherein the height of said

pillar-type protrusion does not go beyond the height of said column.

8. The heatsink of claim 7, wherein said pillar-type
5 protrusion has protrusions and/or recesses on its surface.

9. The heatsink of claim 7, wherein the heat receiving face
protrudes further than said column.

10 10. A method of manufacturing a heatsink comprising:
forming a plurality of first slits along the length of a
column, and
forming a second slit at approximately right angle to the
first slits.

15 11. The method of manufacturing the heatsink of claim 10,
wherein the plurality of first slits are formed by the extrusion
method or the pultrusion method.

20 12. The method of manufacturing the heatsink of claim 10,
wherein the plurality of columns where the plurality of first slits
are formed, are machined on the same jig to form the second slits.

25 13. The method of manufacturing the heatsink of claim 12,
wherein said machining of the second slits is conducted at a time
by a plurality of machining tools.

30 14. The method of manufacturing the heatsink of claim 12,
wherein the shape of the jig where the column is mounted is tilted
in relation to the machining line of the machining tools.

sub
B3
15. A cooling apparatus comprising:
a heatsink comprising:
column having a heat receiving face; and
a plurality of pillar-type protrusions provided on a
5 face other than the heat receiving face of said column in
such a manner that they are parallel to or at a
predetermined angle against the heat receiving face; and
a cooling means mounted on said heatsink.

10 16. The cooling apparatus of claim 15, wherein said pillar-
type protrusions are formed by a plurality of first slits provided
on a face other than the heat receiving face of said column
parallel to the heat receiving face and a plurality of second slits
provided transversely to the first slits.

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17. The cooling apparatus of claim 15, wherein the heat
receiving face protrudes further outwards than said column.

20 18. The cooling apparatus of claim 15, wherein a cross
section of said column has one shape selected from rectangle,
trapezoid, triangle and a shape whose sectional width tapers off as
it goes away at right angle from said heat receiving face.

25 19. The cooling apparatus of claim 15, wherein said
cooling means is selected from one of an air blowing means, a
Peltier element, a heat pipe and dipping in liquid.

30 20. The cooling apparatus of claim 19, wherein said air
blowing means is disposed on the top face of said heatsink, facing
the heat receiving face.

21. The cooling apparatus of claim 19, wherein said air blowing means is a fan which is mounted on the top face of said heatsink in such a manner that the fan sends wind to the heat receiving face.

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